AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1-40. (cancelled)

41. (currently amended) A method for treating cancer, comprising administering to a mammal in need thereof an effective cancer-treating amount of:

i) at least one vector comprising a polynucleotide encoding a polypeptide selected from the group consisting of Cytochrome P450 1A2 (CYP1A2), Cytochrome P450 2E1 (CYP2E1), and Cytochrome P450 3A4 (CYP3A4) ~~CYP1A2, CYP2E1, and CYP3A4~~, having an activity of converting acetaminophen to a cytotoxic molecule, wherein the expression of the polynucleotide is controlled by a promoter, and

ii) acetaminophen.

42. (previously presented) A method according to claim 41, wherein said mammal is human.

43. (previously presented) A method according to claim 41, wherein said vector is a eukaryotic expression vector.

44. (previously presented) A method according to claim 41, wherein said vector is a viral vector.

45. (currently presented) A method according to claim 44, wherein said viral vector is a hybrid viral vector.

46. (currently amended) A method according to claim 44, wherein said viral vector is obtained from a virus selected from the group consisting of adenovirus,[[;]] retrovirus,[[;]] adeno associated virus,[[;]] herpes virus,[[;]] lenti virus, and baculovirus.

47. (currently amended) A method according to claim 41, wherein said promoter is selected from the group consisting of ~~TRP-1; HER2; HER3; ERBB2; ERBB3; CEA; MUC1;~~ N-(5'-phosphoribosyl)anthranilate isomerase (TRP-1) promoter, human epidermal growth factor receptor 2 (HER2/neu/c-erbB2 proto-oncogene or HER2) promoter, HER3 promoter, v-erb-b2 erythroblastic leukemia viral oncogene homolog 2 (ERBB2) promoter, ERBB3 promoter, carcinoembryonic antigen (CEA) promoter, Mucin 1 (MUC-1) promoter, α-fetoprotein promoter,[[;]] Rous sarcoma virus long terminal repeat,[[;]] cytomegalovirus promoter,[[;]] murine leukemia long terminal repeat,[[;]] simian virus 40 early and late promoters,[[;]] herpes simplex virus thymidine kinase promoter,[[;]] prostate specific antigen promoter (PSA),[[;]] villin gene promoter,[[;]] pancreatic amylase promoter,[[;]] tyrosinase related peptide promoter, and tumor rejection antigen precursor promoters.

48. (previously presented) A method according to claim 41, wherein said promoter is a hybrid promoter.

49. (previously presented) A method according to claim 41, wherein said promoter is a tumor-specific promoter.

50. (currently amended) A method according to claim 49, wherein said tumor-specific promoter is selected from the group consisting of TRP-1,[[;]]

HER2,[[;]] HER3,[[;]] ERBB2,[[;]] ERBB3,[[;]] CEA,[[;]] MUC1,[[;]] α-fetoprotein,[[;]] pancreatic amylase promoter,[[;]] tyrosinase related peptide promoter, and tumor rejection antigen precursor promoters.

51. (previously presented) A method according to claim 41, wherein said promoter is a constitutive promoter.

52. (currently amended) A method according to claim 51, wherein said constitutive promoter is selected from the group consisting of villin gene promoter,[[;]] Rous sarcoma virus long terminal repeat,[[;]] cytomegalovirus promoter,[[;]] murine leukemia long terminal repeat,[[;]] simian virus 40 early and late promoters,[[;]] and herpes simplex virus thymidine kinase promoter.

53. (previously presented) A method according to claim 41, wherein said polynucleotide is of mammalian origin.

54. (previously presented) A method according to claim 53, wherein said polynucleotide is of human origin.

55. (cancelled)

56. (previously presented) A method according to Claim 41, wherein the polypeptide is CYP1A2.

57. (previously presented) A method according to claim 53, wherein said polynucleotide is of rodent origin.

58. (cancelled)

59. (currently amended) A method according to claim 41, wherein said cancer is selected from the group consisting of breast,[[;]] pancreatic,[[;]] ovarian,[[;]] cervical,[[;]] lung,[[;]] hepatic,[[;]] renal,[[;]] testicular,[[;]]

prostate,[[;]] gastrointestinal,[[;]] glioma,[[;]] melanoma,[[;]] bladder,[[;]] lymphoma,[[;]] leukemia; epithelial, mesothelial, and retinal cancers.

60. (previously presented) A method of treating cancer comprising administering to a mammal in need thereof, concurrently or in sequence, an effective amount of:

i) at least one vector, capable of transfecting at least one tumor cell, wherein said vector comprises a polynucleotide encoding a polypeptide selected from the group consisting of CYP1A2; CYP2E1, and CYP3A4 having an activity of converting acetaminophen to a cytotoxic molecule, and wherein, the expression of the polynucleotide is controlled by a tumor-specific promoter;

ii) at least one agent selected from the group consisting of methionine and acetylcysteine; and

iii) acetaminophen.

61. (currently amended) The method of claim 60, wherein the vector, agent and acetaminophen are administered sequentially.

62. (cancelled).

63. (previously presented) A composition of matter comprising acetaminophen; and a vector comprising a polynucleotide encoding a polypeptide selected from the group consisting of CYP1A2, CYP2E1, and CYP3A4 having ~~a~~ an activity of converting acetaminophen to a cytotoxic molecule, wherein the expression of the polynucleotide is controlled by a promoter.

64. (cancelled)

65. (previously presented) A composition according to Claim 63, wherein the vector is a eukaryotic expression vector.

66. (previously presented) A composition according to Claim 63, wherein the vector is a viral vector.

67. (currently amended) A composition according to Claim 63 ~~64~~, wherein the vector is a hybrid viral vector.

68. (currently amended) A composition according to Claim 66, wherein the viral vector is obtained from a virus selected from the group consisting of adenovirus,[[;]] retrovirus,[[;]] adeno-associated virus,[[;]] herpesvirus,[[;]] lentivirus,[[;]] and baculovirus.

69. (currently amended) A composition according to Claim 63, wherein said promoter is selected from the group consisting of TRP-1 promoter,[[;]] HER2 promoter,[[;]] HER3 promoter,[[;]] ERBB2 promoter,[[;]] ERBB3 promoter,[[;]] CEA promoter,[[;]] MUC1 promoter,[[;]] α-fetoprotein promoter,[[;]] Rous sarcoma virus long terminal repeat,[[;]] cytomegalovirus promoter,[[;]] murine leukemia long terminal repeat,[[;]] simian virus 40 early and late promoters,[[;]] herpes simplex virus thymidine kinase promoter,[[;]] prostate specific antigen promoter (PSA),[[;]] villin gene promoter,[[;]] pancreatic amylase promoter,[[;]] tyrosinase related peptide promoter, and tumor rejection antigen precursor promoters.

70. (previously presented) A composition according to Claim 63, wherein said promoter is a hybrid promoter.

71. (previously presented) A composition according to Claim 63, wherein said promoter is a tumor-specific promoter.

72. (currently amended) A composition according to Claim 71, wherein said tumor-specific promoter is selected from the group consisting of TRP-1 promoter,[[;]] HER2 promoter,[[;]] HER3 promoter,[[;]] ERBB2 promoter,[[;]] ERBB3 promoter,[[;]] CEA promoter,[[;]] MUC1 promoter,[[;]] α-fetoprotein promoter,[[;]] pancreatic amylase promoter,[[;]] tyrosinase related peptide promoter, and tumor rejection antigen precursor promoters.

73. (previously presented) A composition according to Claim 63, wherein said promoter is a constitutive promoter.

74. (currently amended) A composition according to Claim 73, wherein said constitutive promoter is selected from the group consisting of villin gene promoter,[[;]] Rous sarcoma virus long terminal repeat,[[;]] cytomegalovirus promoter,[[;]] murine leukemia long terminal repeat,[[;]] simian virus 40 early and late promoters,[[;]] and herpes simplex virus thymidine kinase promoter.

75. (previously presented) A composition according to Claim 63, wherein the polynucleotide is of mammalian origin.

76. (previously presented) A composition according to Claim 75, wherein the polynucleotide is of human origin.

77. (cancelled)

78. (previously presented) A composition according to Claim 76, wherein the polynucleotide encodes CYP1A2.

79. (previously presented) A composition according to Claim 63, wherein the polynucleotide is of rodent origin.

80. (cancelled)

81. (previously presented) A composition according to Claim 63, further comprising at least one agent capable of modulating glutathione level in a mammal, wherein the agent is methionine or acetylcysteine.

82. (cancelled).

83. (cancelled).

84. (previously presented) A composition according to claim 81 ~~82~~, further comprising a pharmaceutically acceptable excipient, carrier or diluent.

85. (previously presented) A method for selectively killing cells in a mammal, the method comprising administering to the mammal, concurrently or in sequence, an effective amount of

i) at least one vector comprising a polynucleotide encoding a polypeptide selected from the group consisting of CYP1A2; CYP2E1, and CYP3A4 having an activity of converting acetaminophen to a cytotoxic molecule, wherein the expression of the polynucleotide is controlled by a promoter, and

ii) acetaminophen,

wherein the acetaminophen is converted in the cells into NABQI and wherein said cells do not express a sufficient level of glutathione to detoxify the NABQI.

86. (previously presented) A method according to Claim 57, wherein the mammal is a human, and wherein the method further comprises

administering to the mammal an effective amount of furaphylline that inhibits the activity of human CYP1A2, CYP2E1, or CYP3A4 in cells of the human.

87. (previously presented) A method according to Claim 86, wherein the polypeptide is selected from the group consisting of rodent CYP1A2, rodent CYP2E1, and rodent CYP3A4.